

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An information processing apparatus for recording an AV stream on a recording medium adapted for recording said AV stream, ~~the-Clip information for managing the entity of operable to manage the AV stream, and the-PlayList information managing-operable to manage the reproduction of the AV stream, said information processing apparatus~~ comprising:

means for generating the time information of a characteristic picture in said AV stream, ~~start address information of a domain in which the encoding information in said AV stream is continuous~~ associated with the Clip information, the and map information correlating the time information in said AV stream and the data address information in said AV stream, and the time information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

means for recording the start address information generated by said generating means as-said within a Clip information file on said recording medium.

2. (Currently Amended) The information processing apparatus according to claim 1, wherein the start address information ~~of the domain in which the encoding information in said AV stream is continuous~~ is a start address of the a STC sequence or the a program sequence; and wherein:

the map information correlating the time information and the address information is an EP_map or a TU_map; and

~~wherein~~ the time information of the characteristic picture is ClipMark.

3. (Currently Amended) The information processing apparatus according to claim 1, wherein the recording means further records ~~the information~~ pertinent to an average value of the recording rate of said AV stream on said recording medium.

4. (Original) The information processing apparatus according to claim 3 wherein the information pertinent to an average value is TS_average_rate.

5. (Original) The information processing apparatus according to claim 1 wherein the AV stream is a transport stream.

6. (Currently Amended) The information processing apparatus according to claim 1, wherein the start address ~~information of the domain in which the encoding information in said AV stream is continuous~~ includes a start address of an STC sequence which is a domain where system time clocks of said transport stream are continuous.

7. (Currently Amended) The information processing apparatus according to claim ~~4~~ 5, wherein the start address ~~information of the domain in which the encoding information in said AV stream is continuous~~ includes a start address of a program sequence which is a domain where program contents of said transport stream are constant.

8. (Currently Amended) The information processing apparatus according to claim 1, wherein the start address information ~~of the domain in which the encoding information in said AV stream is continuous~~ includes a start address of a domain where the arrival time based on the arrival time of a transport packet of said transport stream is continuous.

9. (Currently Amended) The information processing apparatus according to claim ~~1~~ 5, wherein the map information correlating the time information and the address information includes an address of an I-picture of said transport stream and ~~its a~~ presentation time stamp corresponding to said transport stream.

10. (Currently Amended) The information processing apparatus according to claim 9 further comprising:

compression means for compressing at least part of the map information correlating the time information and the address information in said AV stream[[:]], said recording means ~~records~~ recording said information compressed by said compression means.

11. (Original) The information processing apparatus according to claim 1 wherein the information correlating the time information and the address information in said AV stream includes an arrival time based on the arrival time of a transport packet and an address in said AV stream data of a transport packet associated therewith.

12. (Currently Amended) An information processing method for recording an AV stream on a recording medium, adapted for recording said AV stream, the Clip information for managing the entity of operable to manage the AV stream, and the PlayList information ~~managing~~ operable to manage the reproduction of the AV stream, said method comprising:

a step of generating the time information of a characteristic picture in said AV stream, start address information of a domain in which the encoding information in said AV stream is continuous associated with the Clip information, ~~the and~~ map information correlating the time information in said AV stream and ~~the address information in said AV stream~~, and the time information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

a step of recording the start address information generated by said generating step as ~~said within a~~ Clip information file on said recording medium.

13. (Currently Amended) A ~~recording medium having recorded thereon a computer-readable program for an information processing apparatus, adapted~~ computer-readable recording medium for storing a computer program for recording an AV stream on a recording medium, ~~the recording medium~~ carrying said AV stream, the Clip information for managing the entity of the operable to manage the AV stream, and the PlayList information ~~managing operable to manage~~ the reproduction of the AV stream, wherein said program including comprises:

a step of generating time information of a characteristic picture in said AV stream, the start address information of a domain in which the encoding information in said AV stream is continuous associated with the clip information, ~~the and~~ map information correlating the time information in said AV stream and ~~the data address information in said AV stream~~, and the time

~~information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and~~

a step of recording the start address information generated by said generating step as said within a Clip information file on said recording medium.

14. Canceled.

15. (Currently Amended) An information processing apparatus for reproducing an AV stream from a recording medium having recorded thereon said AV stream, the Clip information ~~for managing the entity of~~ operable to manage the AV stream, and the Playlist information ~~managing operable to manage~~ the reproduction of the AV stream, said information processing apparatus comprising:

means for reproducing the time information of a characteristic picture in said AV stream, ~~start address information of a domain in which the encoding information in said AV stream is continuous~~ as said Clip information, the and map information correlating the time information in said AV stream and the data address information in said AV stream, and the time information of a characteristic picture in said AV stream, as said Clip information wherein the data address in the AV stream is found by referencing the time information in said AV stream;
and

means for controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means.

16. (Currently Amended) An information processing method for reproducing an AV stream from a recording medium, having recorded thereon said AV stream, the Clip information for managing the entity of operable to manage the AV stream, and the PlayList information managing operable to manage the reproduction of the AV stream, said method comprising:

a step of reproducing the time information of a characteristic picture in said AV stream, the start address information of a domain in which the encoding information in said AV stream is continuous associated with the Clip information, the map information correlating the time information in said AV stream and the data address information in said AV stream, and the time information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

a step of controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means,

said recording medium having recorded thereon said AV stream, said Clip information for managing the entity of the AV stream, and said PlayList information for managing the reproduction of the AV stream, wherein a Clip information file associated with the Clip information and a PlayList information file associated with the PlayList information are recorded separately in order to provide a reduction in recording time when the contents of the Clip information file and the PlayList information file are changed.

17. (Currently Amended) A recording medium having recorded thereon a computer-readable program for an information processing apparatus adapted computer-readable recording medium for storing a computer program for reproducing an AV stream from the recording medium, on which said AV stream, the Clip information for managing the entity of operable to

manage the AV stream, and the PlayList information managing operable to manage the reproduction of the AV stream are recorded[[:]], wherein said program including comprises:

a step of reproducing time information of a characteristic picture in said AV stream, the start address information of a domain in which the encoding information in said AV stream is continuous associated with the Clip information, the and map information correlating the time information in said AV stream and the data address information in said AV stream, and the time information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

a step of controlling the outputting of said AV stream based on said Clip information reproduced by said reproducing means.

18. (Currently Amended) A program for causing a computer controlling an information processing apparatus computer-readable recording medium for storing a computer program for reproducing an AV stream from a recording medium to execute, wherein said program comprises:

a step of reproducing time information of a characteristic picture in said AV stream, the start address information of a domain in which the encoding information in said AV stream is continuous associated with the Clip information, the and map information correlating the time information in said AV stream and the address information in said AV stream, and the time information of a characteristic picture in said AV stream wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

a step of controlling the outputting of said AV stream based on the Clip information reproduced by said reproducing means;

said recording medium having recorded thereon said AV stream, said Clip information for managing ~~the entity of the~~ AV stream, and PlayList information for managing the reproduction of the AV stream, wherein a Clip information file associated with the Clip information and a PlayList information file associated with the PlayList information are recorded separately in order to provide a reduction in recording time when the contents of the Clip information file and the PlayList information file are changed.

19. (Currently Amended) A ~~recording medium having recorded thereon a program for an information processing apparatus~~ computer-readable recording medium for storing a computer program, wherein the computer program comprises:

for reproducing an AV stream from a recording medium on which said AV stream, the Clip information for managing ~~the entity of the~~ AV stream, and the PlayList information ~~for managing the reproduction of the~~ AV stream are recorded[[:]], wherein time information of a characteristic picture in said AV stream, the start address information of a domain in which the encoding information in said AV stream is continuous, the and map information correlating the time information in said AV stream and the data address information in said AV stream, and the time information of a characteristic picture in said AV stream are recorded on the recording medium as said Clip information are recorded on the recording medium as said Clip information, wherein the data address in the AV stream is found by referencing the time information in said AV stream; and

recording on said medium the AV stream, the Clip information for managing the AV stream, and the PlayList information for managing the reproduction of the AV stream, wherein a Clip information file associated with the Clip information and a PlayList information

file associated with the PlayList information are recorded separately in order to provide a reduction in recording time when the contents of the Clip information file and the PlayList information file are changed.